

ST. MARY'S CITY COMMISSION

St. Mary's City, Maryland 20686

November 29, 1976

Mr. Robert Bushnell
Land Planning Services
Department of Natural Resources
Tawes State Office Building
Annapolis, Maryland 21401

Dear Rob:

Thank you for the proposals for Archaeological Investigations at Fort Frederick State Park. Following are my comments:

Ronald G. Orr

An amateurish presentation.

L. E. Babbitts

Larry is an enthusiastic, hard working specialist in mid-eighteenth-century military remains, but I am not sure of his competence to be the principal investigator responsible for completing a major archaeological report. I would check his references and publications very carefully. His proposal does contain some very good advice, including the need for a grid system (although a 5' grid with 6" baulks is inadequate), soil samples, and hand excavation.

[Note: I am skeptical about mechanical, rush archaeology on state owned lands. Our archaeology should be the best of which our generation is capable, and it should be conducted in such a way that our data can be reanalyzed and our excavations extended in 50 or a 100 years. Our sampling system must be rigorous, with sections from all areas and most strata screened. Duplicate soil and (where applicable) pollen samples should be collected systematically.]

Mid-Atlantic Archaeological Research, Inc.

The principal investigator clearly demonstrates that he is a competent excavator and research administrator, but I fail to see in the proposal a clear grasp of what we might hope to learn from the excavations at Fort Frederick. The principal investigator is relying on his consultants for ideas as well as technical expertise. I am also disturbed by the lack of thought devoted to sampling techniques. The grid proposed for the SW

bastion looks efficient, but it intersects the known architectural remains at inconvenient angles and is incapable of extension to other areas of the site. Thus it continues the fragmentary record keeping system which Babits and National Heritage criticize. His trench layouts appear to be designed more to facilitate the use of heavy machinery than testing. Having made many of the same mistakes which the principal investigator is proposing, I should hate to see them repeated.

A strong point of this proposal is that the costs are fully broken down so that their resource allocation is very clear. The overhead charge seems reasonable, and the sources of technical expertise are apparent. While I do not know their zooarchaeologist, I am familiar with Ms. Cosans. She is very knowledgeable of eighteenth-century artifacts. However, I have not had an opportunity to examine her reports and I would recommend that you ask to see a sample of her work for comparable clients.

National Heritage

Without question this is the most professional proposal submitted. Their research design is excellent. Despite the fact that the principal investigator's past interests center far from the anthropology/social history of eighteenth-century America, he and only he demonstrates a clear enough grasp of the potential value of research at Fort Frederick to interest the reviewer (a historian).

He has also succeeded best in the mundane problem of fitting a grid to the excavation of the site. His grid looks unduly complicated, but that is largely because he has illustrated excessive detail and has adopted from Noël Hume a horrible designation scheme (I used it once). I would suggest a N---ft/W---ft. designation system combined with equal width baulks (2.5 ft.). His grid also lacks a section line down the axis of the bastion (to check for a ramp, etc.), which could be remedied by compiling diagonal profiles from the central line of squares during excavation.

The defects of the proposal are that it does not show the source of the technical expertise needed to answer the questions raised in the research design. I think you should inquire as to who will identify the zooarchaeological remains and on what data will they base their theories about acculturation, social status, etc. On a per unit basis, they are also the most expensive consultant.

I hope this is of assistance.

Sincerely yours,

Garry Wheeler Stone
Archaeologist

GWS:pah

enclosures

c.c. Tyler Bastian

Garry Stone

3 Dec 1976

Tyler Bastian

Fort Frederick

Just a quick note to express my considerable appreciation for your very perceptive comments on the Fort Frederick Proposals. Your letter had not arrived in my mail when I left for Annapolis yesterday to attend the meeting to discuss the proposals. I had reached pretty much the same conclusions as you have, so I was pleased when Rob Bushnell opened the meeting by reading your letter. Some useful discussion followed, the decision to select National Heritage seemed unanimous (although no formal vote was taken). We are meeting with Townsend in Annapolis on Monday to discuss his proposal with him before making a final decision, but I do not anticipate any problems. We will raise the points you have made with regard to his proposal.

My thanks again for your interest and considerable assistance. Unfortunately, when you do such a good job you are inviting more work for yourself!

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MARYLAND GEOLOGICAL SURVEY

THE JOHNS HOPKINS UNIVERSITY

BALTIMORE, MARYLAND 21218

Selection of Consultant for Archeological Investigations at Fort Frederick State Park, Maryland. Statement of Justification

The four proposals received were reviewed by a committee consisting of Robert Bushnell, planner with Land Planning Services; Ross Kimmel, historian with the Maryland Park Service; Leland Gilson, archeologist with the Maryland Historical Trust; Garry W. Stone, archeologist with the St. Mary's City Commission; Joseph McNamara, archeologist with the Maryland Geological Survey; and Tyler Bastian, the State Archeologist. The committee concluded that the proposal submitted by the National Heritage Corporation clearly presents the most professional research design and the best understanding of both the services required and the potential value of archeological research at Fort Frederick. The archeologists on the National Heritage staff have a superior back up organization and record of achievement on previous projects. While the lower-priced proposal submitted by Larry Babits exhibits excellent knowledge of 18th century fortifications and their archeology, he greatly overestimates the amount of work possible in the time and cost frame that he proposes. Babits lacks the experience, back up organization, and record of achievement possessed by the National Heritage Corporation.

Tyler Bastian
Tyler Bastian
State Archeologist
21 December 1976

Dear Ron:

Your letter of 9 Jan 1977 to Robert Bushnell of the ~~Mr~~ DNR Capital Programs Administration was forwarded to me for reply the week following the conference at Newark. I'm sorry for the long delay in responding. There seem to be 4 major points of concern outlined in your letter: comprehension of project objectives, meeting of specifications in the RFP, the meaning of "negotiated procurement", and the influence of bid price on the selection of proposals. I will try to answer each point in turn.

Proposal for Archaeological Investigations
at Fort Frederick State Park, Washington
County, Maryland

Purpose: to obtain constructional and occupational details of the 18th century (time period of the) fort for an interpretive program.

Course of action - 3 specific projects are to be undertaken:

1. Extensive excavation of the southwest bastion

- a. archaeological procedure- establish datum plane, grid in 10 foot squares - time 1/2 day (4 hours); survey grided area within bastion with Soil Conductivity Meter (maximum price approx. \$250) far cheaper than Proton-Magnetometer. Deflections of the meter needle will indicate anomalies - pits produce slightly positive conductivity anomalies (strongly positive for metals); depths can be estimated from needle deflections. An assistant will be required to put in stakes where anomalies are noted. A soil anomaly will be shown by a maximum needle movement as the instrument passes over boundary between undisturbed and disturbed soil. Using the archaeological plan of the CCC, and the excavation plans of William Liesenbein in 1973, known anomalies from these previous digs will be surveyed first to check the meter instrument within the bastion - time 2 days (16 hours) for director and assistant. Liesenbein's trenches will be located and identified with string and their fill will be machine ("Ditch Witch") removed, and the sides troweled clean by hand - time 3 days (24 hours) with director, assistant and Ditch Witch operator. With the stratigraphic information of Liesenbein's and the CCC trenches I will move in on those sensitive areas shown by the Soil Conductivity Meter that will hopefully indicate perimeters of known rubbish pits plus any new anomalies not indicated in Liesenbein's archaeological plan for the southwest bastion (especially between trenches E and C within 10 foot grid sections).

Previously known areas to further excavate and concentrate

2.

on: the trash layer (dated 1756-1770) in the northeast face of Square 1 and the southeast face of Trench B; the thin occupational layer and brown layer dated 1756-70 in Trench A ; the postmold (possible) pattern outside the northern section of Trench C and a "very large pit" (possible CCC disturbance) should be explored in the west face of the southern half of Trench C, and an occupation lens (1756-70) in the east face of the same trench. Also to be further excavated are the garbage and occupation layers of the south face of Square 2 (dated 1756-1770) plus later trash deposit (dated 1779-1850) in Square 2 - the west face of the bank separating Trench C and Square 2 - pay especial attention to the "charred board" area of adjacent Trench C. Excavate the brick layer and the occupation lens (1756-1770) and check the organic lens (possibly before 1756) that lies over the undisturbed subsoil noted in Trench D, north profile. And in Trench E the brick layer (under topsoil) and the underlying occupational layer (dated 1756-70) both noted in the southeast face (south half of trench); and the trash layer (dated 1756-70) exposed in the northern third of the east profile of Trench E. And finally in Trench F, the south face, concentrate on the brick layer (again under the top soil) and the underlying occupational layer (date?).

- b. archaeological procedure - remove topsoil over known features and disturbed soils whose known perimeters can possibly be expanded with the aid of the Soil Conductivity Meter, then 1 layer at a time (i.e brick, fill, and occupational layer (s)- of the 18th century that might have a continuousness over a sizeable portion of the Southwest bastion) remove and record exercising special precautions in exposing features' builder's trenches etc. (Also check with conductivity meter and expose through hand digging possible shale over decayed wood about 15 feet in from bastion wall as part of the second project of exposing an interior parapet wall). Total estimated excavating time hand digging of director, senior advisor (1 day out of every 5) and 1 trained assistant - 20 days (160 hours).

2. Trenching for evidence of an exterior ditch and an interior parapet wall - checking with soil conductivity meter around the inner fringe of the entire fort between 5 to 50 feet out - dig 13 trenches 2 feet wide and 20 feet long (except for behind barracks where the distance allowable is probably less). These shall be dug at the ends and the middle of each scarp wall for over-all coverage on a sampling basis. The Ditch Witch shall be used for this with supervision of the operator by the director-archaeologist who will clean, check and record profiles. Time - 5 days for director, assistant, and Witch Ditch operator.

For outwork- use aerial photographs (Strandberg, 1974) and Soil Conductivity Meter to determine soil anomalies of probable outer ditch: concentrating on the north outer side of the Fort (where major aerial view of soil anomalies in possible outwork noted, as well as west outer wall). From the middle of the north and west outer walls, from the inner points of the 3 bastions covering the north and west parts of the Fort (digging perpendicular to the wall), and trenching out from the tips of the 3 bastions - at these points to ascertain the varying distance of the counter scarp and glacis - extend the trench approximately 50 feet out from the middle of the curtain walls and about 30 feet out from the extreme points (assuming the distance directly out to the glacis to be less here). These distances should cross over the lips of the supposed ditch. Allowing at least 9 feet (4 and 1/2 feet on either side of the extreme tips, start a perpendicular trench on a line that would bisect the Fort); for the width of each trench to avoid cave-ins should be 9 feet for maneuverability of machines (heavy excavator for fill) and provide enough light for hand excavation of silt layers and original surface of ditch in search of accumulated artifacts.

2 trenches on either side of the Fort entrance should be machine and then hand dug when the approximate depth of the supposed filled-in ditch is determined along the north and west walls. This would be especially important as an area of accumulation of throw-aways (as the area of greatest activity). The exact location of these trenches

4
at the entrance gate will be determined by a cross trench, parallel and approximately 10 feet out from the entrance to allow operation of the Ditch Witch across the visible entrance path to approximately 10 feet on either side to determine possible original width and where the sides of the old ditch or other structures began. Total time: 25 days for director, assistant, Ditch Witch operator and 1/5 of time for senior advisor. Note: Machine digging will stop and hand digging will begin when any palisades, ditch lip, bottom or original surface of either ditch, counter scarp or glaciis is encountered. All features, artifacts and stratigraphy will be duly recorded and photographed as in all excavated areas.

3. exploratory trenching for features near the west exterior side of the fort :

a. archaeological procedure - cross trench foundation area that shows soil anomalies, also test probing for foundation walls with iron T bar if shallow enough wall outline exists. Soil Conductivity Meter survey will be used here, too (in addition to aerial photography of Strandberg, 1974). Hand dig, if possible, and record information. Time- 5 days for director, assistant and 1/5 time for senior advisor.

4. Analysis of findings - materials (artifacts), features, research and completing the written report (illustrated with stratigraphic profiles and photographs of artifacts and features) will take 20 days for director and senior advisor at 1/5 time.

5. Costs:

Director - \$75 a day plus expenses (for hand equipment and per diem) for 80 days.

Senior advisor- \$150 a day plus per diem for total of 16 days.

General assistant- \$32 a day plus per diem for total of 60 days.

Ditch Witch Operator and machine - at standard rate for total of 33 days.

Resumes submitted for Ronald G. Orr, archaeologist director, and Dr. Kenneth G. Orr, archaeologist senior advisor.

Ronald G. Orr

Proposal submitted by
Ronald G. Orr, Nov. 15, 1976.

Can these items be provided by DNR?

Added expense - equipment for trenching of Fort Fredericks outworks:

1. wood or metal bulwark to support sides of trench (if deeper than 2 meters) to avoid possible collapse
2. also if ditch is deep (more than 2 m.) mechanical hoists or excavators, barrow runs, steps or staging posts may be needed to get the spoil away
3. spoil dumping area will have to be well away from the ditch area to avoid pressure and possible fall in from above of loose dirt. Mechanical dump carriers will most likely be used.
4. a sump pump or pumps will have to be used for any ground water drainage in big (deep) ditches
5. artificial lighting may have to be provided. (see Alexander 1970, 232-33)

References Cited

Alexander, John

1970 The Directing of Archaeological Excavations.
New York: Humanities Press Inc.

Bastian, Tyler

1976 Request for Proposal
Archaeological Investigations
at Fort Frederick State
Park, Washington County,
Maryland.

Liesenbein, William

1975 Report on the preliminary investigation of the southwest and northeast bastions of Fort Frederick conducted in October 1973.

Reed, Washington, Jr.

1934 Archeological Plan, Fort Frederick.

NAME:

RONALD G. ORR

HISTORIC/ARCHEOLOGICAL ANALYST

PROPOSED

ASSIGNMENT:

Director - Archaeologist -

Archaeological Investigations, Ft. Frederick

EDUCATION:

Chung Chi College, Chinese University of Hong Kong,
1965-1966

University of Arkansas, Fayetteville, 1966-1968

State University of New York, Plattsburg, 1968-1969

B.A., American University, Washington, D.C., 1969-1970

Graduate-Defense Language Institute, Monterey, California,
1971

Medical Training Center, Fort Sam Houston, Texas, 1971

Graduate Studies Anthropology, University of Maryland,
College Park, Maryland, spring semester, 1976

Graduate courses taken include "Prehistory of the
Eastern United States," and "Behavioral Archaeo-
logy as it Applies to Historical Archaeology."

Johns Hopkins University, Baltimore, Maryland, fall
semester, 1976

Anne Arundel Community College, 1976-present

EXPERIENCE:

1974-1976

Conservation Associate, Water Resources, with
Department of Natural Resources (1976-present).
Consultant; Orr and Son Archeological Consultants,
Oxon Hill, Md. (1974-1976). Performed preliminary
surveys for the Catoctin Furnace Shoring Test site for
the Md. Department of Natural Resources (1975-1976);
for the "Schiefferstadt" farm, Frederick, for Frederick
County Landmarks Foundation, Catoctin Furnace,
Stack # 2 Casting Shed site for the Department of
General Services and the Md. Geological Survey (1975);
and for Md. State Highway Administration of Md.
Route 227 and Md. Route 2-4 (in Pennsylvania--U.S.
422 Bypass for Penn. Department of Transportation)
(1974-1975). Performed excavations at the 99 Main
Street and Paca Gardens sites, Annapolis, Md., for
Historic Annapolis, Incorporated (1974-1975).

1969-1970

Graduate assistant, Department of Anthropology,
American University.

1968

Summer excavations at Dickson Mounds, Springfield,
Illinois.

1962

Summer excavations at West African Liberian village sites.

Military and medical experience extended from 1970-1974: ambulance medic, Jungle Training School (for Latin American officers) and ward corpsman, Health Clinic, Fort Clayton, Canal Zone, Panama (1970-1972); Health team, Civil Affairs Unit Army Reserve, Fayetteville, Arkansas (1973); Nursing technician--Surgical Intensive Care Unit, Arlington, Virginia Community Hospital (1974).

PUBLICATIONS:

(co-authored with Kenneth G. Orr, Ph.D.)

February, 1975

"The 99 Main Street Site, Annapolis, Md., A Preliminary Field Report," Oxon Hill, Md.

April, 1975

"The Archaeological Situation at the William Paca Garden, Annapolis, Md., The Spring House and the Presumed Pavilion House Site," Annapolis, Md.

May, 1975

"A Preliminary Field Report on the Archaeological Situation at the Schiefferstadt House, Frederick, Md.," Oxon Hill, Md.

July, 1975

"A Preliminary Archaeological and Historical Reconnaissance of U.S. Route 422 By-Pass between Hummelstown and Myerstown, Pa.," Oxon Hill, Md.

September, 1975

"Field Report on the Archaeological Situation of the Catoctin Furnace Stack 2, Casting Shed Site, Frederick Co., Md.," Oxon Hill, Md.

January, 1976

"Field Report of the Archaeological Investigation (FO4) of Areas of the Catoctin Furnace, Frederick, Md., disturbed by 13 temporary Shoring Cleats of the Retaining Wall," Oxon Hill, Md.

June, 1976

Graduate Papers on archeology: "The Germanic Peasant: A Lesson in Cultural Persistence. In His Relationship to the Land: A Lesson in Archaeology," Annapolis, Md.

Note: All phases of archeological work, with the exception of photography which I handled exclusively, were shared in common between Dr. Kenneth G. Orr and myself.

CURRICULUM VITAE

KENNETH GORDON ORR, 5003 Winthrop Street, Oxon Hill, Maryland 20021
301-567-0019.

Education

Columbia College, New York: B.A. 1937 (Liberal Arts).
University of Chicago: M.A. 1942; Ph.D. 1944 (anthropology).
Foreign Service Institute, Department of State, Washington, D.C.: Orientation courses - Iraq (1952), Liberia (1960), Laos (1965).

Associations and Honors

Seven years of scholarships at Columbia College and the University of Chicago.
Sigma Xi Honorary Scientific Fraternity, University of Chicago Chapter.
American Anthropological Association - Fellow.
Society for American Archaeology - Fellow.
Society for Applied Anthropology - Fellow.
Burma Research Society - Contributor.
Anthropology Society, University of Rangoon - Patron.
Maryland Archaeological Society - Stiner Memorial Lecturer, 1975.
Rotary Club (anthropologist) - Vientiane, Laos and Fayetteville, Arkansas.
Demobilization Award in Social Sciences 1945.
Tribal robe awards in Liberia for contributions to community development:
Honorary Paramount Chief of Mandingo Tribe; Loma Tribe; Mt. Nimbo County.
Honorary Headquarters Clan Chief, Kpelle Tribe.
Honorary Paramount Chief of Liberia, with distinguished name of "Bona"
("first born").
Honorary Member of UNESCO Board of Experts on Human and Animal Ecology for the
Arid Zone, for the Hashimite Kingdom of the Jordan.

Experience

Federal Government (since 1938): 14 years, including 12 years assisting governments in the Middle East, Africa, and the Far East in community analysis and development; and in assisting U.S. Government agencies' technicians and administrators utilize anthropological fieldwork and research methodology in planning, implementing, and evaluation of projects for community betterment in public administration, agriculture, education, health and medicine, personnel training and management, and public safety as STAFF ANTHROPOLOGIST concerned with problems of socio-cultural change, and evaluating social soundness and feasibility of projects. Interpersonal relations - Americans/others.

Chief, RESEARCH AND EVALUATION OFFICER, U.S. Agency for International Development, Mission to Laos, 1965-67.

Principal coordinating COMMUNITY DEVELOPMENT OFFICER, U.S. Agency for International Development, Mission to Liberia (1960-65) and Jordan (1953-54)

PROGRAM OFFICER in charge of Iraqi community research, U.S. Technical Cooperation Administration, Mission to Iraq (1952-53)

U.S. Government FULBRIGHT AWARDS PROFESSOR and Chairman, Department of Anthropology, Rangoon University, Burma; archaeological and ethnological research 1950-51 (2 awards); consultant to U.S. Economic Cooperation Administration and Director of ECA-Rangoon University Burmese Village Research Project.

Contract Consultant to Department of Health, Education and Welfare (Iran Nutrition Team, 1956); U.S. Foreign Service Institute (Interpersonal Relations between Americans and Arabs, Iranians, and Burmese 1955), U.S. Department of State (Sources on the Peoples of the Philippine Islands, 1956).

U.S. Army, Information and Education ORIENTATION SPECIALIST, 1943-45, Tec 4 grade.

ARCHAEOLOGICAL SUPERINTENDENT, U.S. Works Projects Administration for Oklahoma - University of Oklahoma Statewide Archaeological Program, 1938-40, in charge of excavations in Leflore, Cherokee County excavations.

Universities: 14 years teaching and research in U.S. and foreign universities at undergraduate and graduate levels.

SENIOR LECTURER IN ANTHROPOLOGY: University of Maryland, College Park 1974 - present.

PROFESSOR OF ANTHROPOLOGY: State University of New York, Plattsburgh 1968-71 ; University of Arkansas, 1967-68.

ASSOCIATE PROFESSOR OF ANTHROPOLOGY: American University of Beirut, Lebanon, 1957-58

ASSISTANT PROFESSOR OF ANTHROPOLOGY: and Chairman, Department of Anthropology, University of Oklahoma, 1946; University of Chicago, 1946-50.

VISITING PROFESSOR OF ANTHROPOLOGY: Rangoon University, Burma, and Chairman, Department of Anthropology; University of Oregon, 1956-57.

RESEARCH ASSOCIATE: and Chairman, inter-disciplinary team, Human Relations Area Files, Yale University, Country Handbook (Iran), Washington, 1955-56

Other:

APPLIED ANTHROPOLOGICAL STUDIES: self-supported travel and study on application of anthropological factors to development problems in Southeast Asia, U.K., Spain, and Meso-America, 1971-74.

CONTRACT ARCHAEOLOGIST: archaeological surveys and investigations for state organizations (historical impact statements) and historical societies in Maryland and Pennsylvania, 1974-present (Orr & Son).

References and List of Publications available on request.

PROPOSAL FOR ARCHAEOLOGY
AT FORT FREDERICK STATE PARK
WASHINGTON COUNTY, MARYLAND

Submitted by
L. E. Babits

INTRODUCTION

As part of the continuing archaeological investigation of Fort Frederick, additional information will be sought about structural features both inside and outside the fort. The proposed work builds on information contained in historical documentation, recent archaeological reports and the results of an aerial photographic reconnaissance.

We propose that as part of the ongoing work at Fort Frederick a permanent grid referral system should be established to permit the easy and accurate recording of the location of features over a longer timespan than heretofore utilized. Establishment of this grid will permit systematic longterm exploration to be made of various areas without costly duplication of effort by numerous investigators. To date this has not been done. In fact, one of the problems in estimating the time frame involved in the proposed excavations has been the absence of definitive locations for previous work.

1974 Excav. tied to certain walls

The grid system would also be of use in continuous and wide ranging scientific methods of subsurface exploratory testing such as shallow seismic sensing, resistivity, and magnetometer surveying.

Testing of hypotheses as they are developed would result from the continuous flow of information about the fort and outlying features without recourse to duplication.

We propose that a six stage plan of work be utilized to complete the work during 1977. This work is to commence in April 1977 in the first frostfree week following a ten to fourteen day period without rain.

In two to three week increments, additional work stages

do not distinguish CCC between 18th Century and 19th Century ground levels → see page

constructed upon Stage One will be completed. By 15 June 1977, all field work should be completed in time for backfilling of open excavations prior to the expected arrival of large numbers of summer tourists. By 15 July 1977, the compilation of information recovered from the field work, as well as the treatment of artifactual material, should be completed. A draft report will be submitted by 30 September 1977. After revisions suggested in debriefing sessions with personnel of the Maryland Department of Natural Resources, the final report will be submitted.

*if there are many artifacts
15 July date may not be realistic*

INVESTIGATORS

(see below)
Both investigators have had considerable experience in dealing with visitation to archaeological sites. The planned sequence of excavation is based on this experience and designed to insure that there will be no open areas of investigation without one of the senior investigators present to offer explanations to the visitors.

It should be pointed out that the principal investigator has had considerable experience working and supervising 18th century military sites, including one site which was contemporary with Fort Frederick (Fort Dobbs, Iredell County, North Carolina).

During the period of field work and artifact processing and preservation, volunteer workers will be accepted on an individual basis determined by their experience and the type of work being done. The possibility of students working on the site for academic credit (probably through the University of Maryland, College Park), is being explored and, if feasible, should increase the available labor force to some extent.

All salaried workers will be at least experienced upper level, undergraduate archaeology students from the Maryland/Virginia area.

SOW = scope of work
SOS = scope of services

FIELD TECHNIQUE

It is not proposed to utilize machine excavation at this site, even for the trenchings and the removal of overburden, because machinery would be difficult to control in the confined space of the southwest bastion where the overburden is of varying thickness. ^{Fl. note.} Along the north curtain wall, a backhoe would be as likely to disturb, if not destroy, ^{↓ how destroy!} cultural material, including post lines and features, as reveal it. Accordingly, we propose to utilize hand excavation techniques which will still be operable within the time frame we have suggested.

Why differ
From SOW?

All excavation will be done by hand to ensure the maximum acquisition of information as well as accurate control of the excavations horizontal and vertical dimensions. All trenches will be five feet wide with balks ^{2-3 feet} six inches wide every five feet to ensure stratigraphic accuracy and improve observation. The balks will be removed, after they have been profiled, to ensure accurate profile drawing of the entire length of the trenches.

All units to be excavated in the southwest bastion will be five feet square ^{and later enlarged}. Wherever feasible, units will be excavated by natural levels. In those cases where natural levels exceed six inches, arbitrary six inches levels will be utilized to insure greater control of the stratigraphic column.

All units will be sited in with a transit as part of the grid system to be instituted as Stage One. ^{and grid stakes placed into the grid!}

All units will be drawn to the same measured scale and photographed in profile and plan view. Photographs will consist of 35mm color slides and 120 (2½ x 2½) black and white negatives.

All features will be excavated and recorded separately.

even the overburden?
or landscaped fill?

All material removed will be screened through $\frac{1}{4}$ inch hardware cloth. Soil samples will also be taken. Where appropriate, the material will be subject to floatation and finer screening.

Backfilling will be accomplished using equipment hired for the purpose.

PLAN OF WORK

Stage One:	The Preliminary Survey	Two Weeks	\$2731.54
Stage Two:	Exploration of Curtain Wall Anomalies	Two Weeks	\$2026.62
Stage Three:	Excavation of Southwest Bastion	Three Weeks <i>too short a period</i>	\$3008.62 <i>doubtful</i>
Stage Four:	Post Excavation Organization of Field Notes, Drawings, Photographs and Artifacts	Four Weeks	\$3906.12
Stage Five:	Preparation of Draft Report	Five Weeks	\$3268.29
Stage Six:	Completion of Final Report	Four Weeks Twenty Weeks	\$2390.75 \$17331.94

Stage One: The Preliminary Survey. Over a period of two weeks in April 1977, we propose to site in a permanent grid system over the site and to conduct a resistivity survey along both the north and west curtain walls. *effort here should be de-emphasized here and put into SW Bastion effort*

No previous archaeological grid system has survived. In fact, the 1930's CCC work was a system of crossing trenches, but no evidence for benchmarks, permanent datum, or map of the trenching has survived. Likewise, *1974 tried to ESW curtain walls* Israel, Liesenbein and Kish used irregularly shaped and oriented trenches and pits not tied to a permanent datum. This post CCC archaeology was of uneven quality and apparently resulted from pressure placed on the excavator by prior commitments to construction contracts by the State.

Accordingly, we propose to establish a series of three permanent benchmarks within the fort itself and four additional

reference points outside the curtain walls. All seven will consist of subsurface concrete pillars aligned in a rectangular pattern. to facilitate coordination of all future work to an overall base plan. The location of these benchmarks is shown in Appendix I.

During the same period, we will also conduct a resistivity survey, in lieu of a less accurate magnetometer survey, outside the north and west curtain walls. This will consist of a series of plottings designed to intersect those areas noted in the Strandberg aerial photographic reconnaissance as having a high probability of containing subsurface architectural features, such as palisade lines and/or defensive ditches.

In addition, a resistivity survey will also be made of the area reported by Israel in 1976 as a "loose granite deposit". This area is to the west of the west curtain wall. *may be CCC construction debris*

Stage Two: Exploration of Curtain Wall Anomalies and the "loose granite deposit". Based on the information obtained through the resistivity survey, we plan to cut at least three trenches at right angles to the north curtain wall to intersect the photographic anomalies noted by Strandberg. These five foot wide trenches will be dug by hand in order to minimize data loss and to ensure the accurate control of profile walls, stratigraphic levels and the location of artifacts.

Immediately following the recordation of information from the exterior trenches along the north curtain wall, two trenches five feet wide will be opened in the interior of the fort to explore for evidence of a postulated interior structural feature variously called a parapet or a casemate. *discussed* *(Kimmel 1974)* This excavation will concentrate on the least disturbed area of the fort between the officer's quarters *?*

discussed not postulated by Kimmel

and the north curtain wall. One trench will be designed to be aligned with one of the exterior trenches to provide an interior-exterior profile of the stratigraphy.

In addition to testing both the interior and the exterior of the north curtain wall, we will also test along the buried electrical line to the west of the fort where trenching revealed a granite lens. This testing will be limited to exploring those anomalies revealed during the electrical trench excavation and confirmed by the resistivity survey. No additional work is proposed for this area at this time.

Stage Three: Excavation of the Southwest Bastion. We will excavate
completely the southwest bastion to test for the possible remains
of a magazine. This work will consist of hand excavation within a grid system of five foot squares and should involve some three weeks of work.

The proposed total excavation does not preclude the necessity of leaving one or two units unexcavated as control blocks for the 1977 excavations.

Since Liesenbein utilized a corner of the flagpole base as his elevation datum during the 1973 work, its removal prior to consolidation within the new grid would destroy the utility of his work. Ideally, this would be accomplished as part of Stage One. We must point out that the flagpole must not be removed until the benchmark system and elevations have been established.

Stage Four: Post Excavation Organization of Field Notes, Drawings, Photographs and Artifacts. We propose to complete this Stage as rapidly as possible after termination of actual field work. All artifacts will be cleaned, labeled and catalogued. Those in need of preservation/stabilization will be treated in accordance with

established professional procedures to ensure their retention for further study. Use of electrolysis, heat treatment and protective coating under the supervision of a professional preservationist is proposed.

who?

Stages Four and Five: Report Preparation. This is self explanatory. The report will follow those guidelines suggested in the scope of work for this project and will be in the format utilized by the Society for Historical Archaeology.

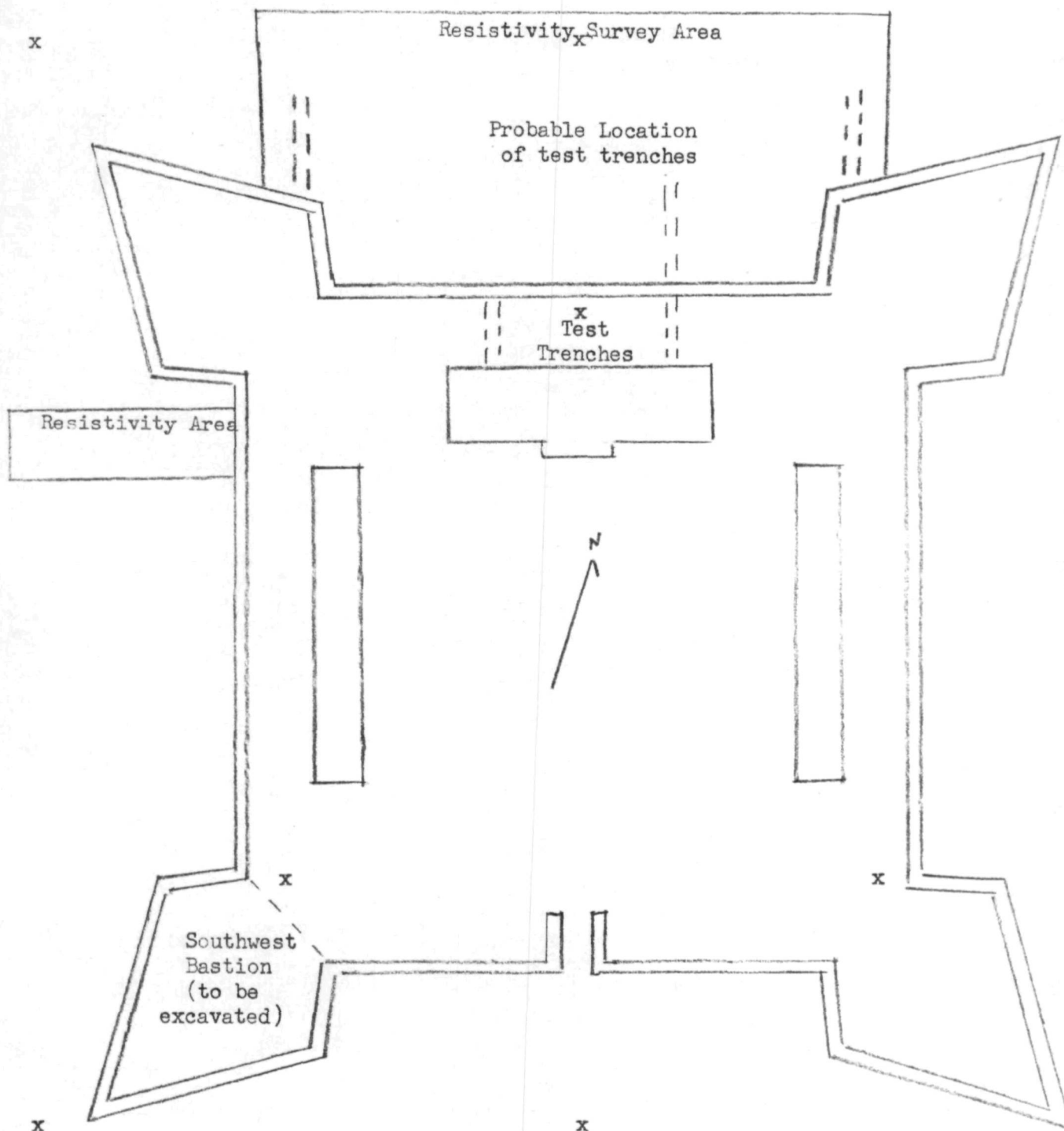
?

too brief
This does
not
Commit
Contractor to
specific DNR
plans and
objectives

Appendix I

Location of proposed
trenches and benchmarks

x = proposed benchmark



Appendix II

BUDGET

Salary of Principal Investigator	\$5,000.00 =
Salary of Assistant Investigator	4,000.00
Salary of Crew <i>how many</i>	4,400.00
Salary of Draftsman	500.00
Salary of Editor/Typist	600.00
F.I.C.A.	1,703.75
Supplies	609.00
Equipment	250.00
Film	302.94
Equipment Rental	250.00
Consultant's Fees	150.00
Miscellaneous Contingency Expenses	320.00
Resistivity Contract	800.00
Report Printing	150.00
TOTAL	\$19,284.69

rate per day etc.?
#50 day - 100 days
#40 day
6 at \$30 per day for 25 days

ITEMIZATION OF SUPPLIES

Stakes (1)	\$ 25.00	String	\$ 15.00
Writing Supplies	25.00	Forms (mimeo paper)	20.00
Binders	15.00	Concrete (benchmarks)	10.00
Receipt Books	5.00	Graph Paper	15.00
Field Journals	20.00	Note Pads	15.00
Ziptone	15.00	Rapitographs	15.00
Preservation (2)	250.00	Folding Rules	70.00
Line Levels	20.00	Screens	204.00
Paint Brushes	30.00	Whisk Brooms	10.00
Pruning Shears	15.00	100 foot Tapes	20.00
Trowels	25.00	Masking Tape	15.00
1500 #10 Bags	22.00	Baggies	16.00
Plastic Sheeting	125.00	TOTAL	\$609.00

- (1) Stakes will be 2 foot $\frac{1}{2}$ inch steel rods which are $\frac{1}{3}$ the cost of wooden stakes and can be reused indefinitely.
 (2) Preservation costs are estimated. Until artifactual material recovered, any figure would be an estimation.

ITEMIZATION OF EQUIPMENT

Maul	\$ 5.00	Bolt Cutter (1)	\$ 20.00
Shovels	35.00	Plumbobs	5.00
Pick Mattaxes	15.00	Wheel Barrows	120.00
Curved Ruler	10.00	Protractor	2.50
Compasses	10.00	Miscellaneous	27.50
			\$250.00

- (1) Bolt Cutter is needed to cut steel rods into stakes

Vita

APPENDIX IV
Vita of Assistant
Investigator

Name: John J. Shea

Address: 7012 Woodland Avenue
Takoma Park, Maryland, 20012

Birthdate: 25 May, 1947

Birthplace: Huntington, West Virginia

Education: Our Lady of Good Counsel High School
Wheaton, Maryland
Graduated Spring 1965
University of Maryland
College Park, Maryland
Graduated Spring 1970
Bachelor of Arts, Anthropology
University of Maryland
College Park, Maryland
Candidate for Master of Arts, Anthropology

Employment: Visiting Research Assistant, Smithsonian
Institute, Office of Academic Programs
June , 1968 through June, 1969
Field Assistant, Thunderbird Archaeology
Site, Virginia
Summer 1970
Field Assistant, University of Maryland
Archaeological Field school, Les Vercors,
France
Summer 1971

Acting Instructor, University of Maryland
Archaeological Field School, Obrecht Site
Maryland

Summer 1974

Lecturer, University of Maryland, Univer-
sity College, College Park, Maryland

Summer, Fall 1976

Graduate Assistant, University of Maryland
Department of Anthropology, College Park,
Maryland

Fall, 1971 through Fall, 1976

Courses Taught:

Introduction to Anthropology

Man and Environment

Introduction to Archaeology

A PROPOSAL FOR

ARCHAEOLOGICAL INVESTIGATIONS AT
FORT FREDERICK STATE PARK,
WASHINGTON COUNTY, MARYLAND

PREPARED BY

MID-ATLANTIC ARCHAEOLOGICAL RESEARCH, INC.
949 WESTVIEW TERRACE
DOVER, DELAWARE 19901
678-9394

Ronald A. Thomas
November 15, 1976

Submitted to the Maryland Department
of Natural Resources, Capital Programs
Administration, Annapolis, Maryland

ARCHEOLOGICAL INVESTIGATIONS AT FORT FREDERICK STATE PARK

INTRODUCTION

The archaeological investigations here proposed follow a series of archaeological excavations and historical studies conducted over the past forty years for the purpose of elucidating the nature of the cultural resources existing at the Fort Frederick site. Excavations have revealed the location of certain historical features and have contributed to the interpretation and restoration of Fort Frederick. Historical research and a photoarchaeological study, however, has indicated that much remains to be determined about the existence of and exact location of major activity areas and structural features. Without additional information concerning these historically significant features further restoration and interpretation of the State Park will be hampered.

As derived from the various investigative reports available for study at the Tawes Office Building of the Department of Natural Resources it appears that the following features are to be investigated:

Southwest Bastion Powder Magazine - excavations by Liesenbein did not locate any structural features during his 1973 excavations although he did locate an unexplained feature near the southern wall of the bastion. Emil J. Kish, architect, has proposed reconstruction of the bastion near the north and east end of the bastion. The exact location and size must be determined.

Interior Curtain Walls - Historical studies by Ross M. Kimmel suggests a 16 foot thick earth-filled curtain wall as a possible structural feature at Fort Frederick as originally constructed. Since this wall would have butted up against the present stone facing wall evidence of it would possibly exist within the fort. The presence and nature of this wall is to be investigated.

Exterior Ditch and "Outworks" - The presence of an exterior ditch, a glacis and a possible ditch palisade were suggested by Kimmel based on his study of then current fortification construction procedures. These features are to be investigated. If both a ditch and an earth-filled curtain wall once existed the filling in of the ditch by the fill from the curtain wall during the construction of the Revolutionary War prison would obstruct the work and necessitate deep trenching techniques. Liesenbein recommends testing not only to locate the ditch but also to determine if it was a partial ditch.

"Fredericktown", the Contemporary Civilian Community - historical documents demonstrate the presence of a village of perhaps 18 structures in the vicinity of the fort. Archaeological investigations need to determine the location of structural remains and their extent. Work will be conducted to the west of Fort Frederick. Also of interest is the location and size of a contemporary cemetery and possible trenches outside of the fort proper.

The four general objectives of the proposed investigations are: 1. to aid further reconstruction at the fort, 2. to provide information and artifacts for the planned interpretive center, 3. to contribute to our knowledge of frontier military and civilian life, and 4. to stimulate public interest in archaeology, the fort, and Maryland's past. These objectives can be met during the proposed project in various ways. It appears that the following can be accomplished:

- Objective 1 - the determination of structural and occupational features will contribute towards this goal. Proper interpretation is critical and this proposal includes the use of experienced crew and "on-the spot" consultants to accomplish this. It is proposed that consultants, consisting of individuals with prior experience in historic sites archaeology (including military sites), will be present at the excavation sites a minimum of once a week and at the least during the excavation of important features. Crew members will include individuals with prior experience under recognized historic sites archaeologists. The photographic record will also emphasize structural features.
- Objective 2 - all artifacts recovered will be identified and those with either historical significance or aesthetic value will be described in additional detail and presented to the Maryland Department of Natural Resources for use in the planned interpretive center. Suggestions for their use will be included.
- Objective 3 - emphasis will be placed on this objective during the analysis phase of the investigations. Analysis of artifactual material will be conducted by consultants who have demonstrated their capabilities and who have indicated their intentions of incorporating their analysis into ongoing research problems. The Fort Frederick material will be interpreted as to those problems and the conclusions included in the consultants report. This is further discussed below.
- Objective 4 - it is suggested, that with Fort Frederick Park personnel approval, all excavation areas be roped off and made available for viewing to the visiting public. Excavations will be conducted, if approved, on a Tuesday to Saturday basis so that weekend visitors can view ongoing archaeological work. It is suggested that a Fort Frederick State Park staff member be assigned to work with the public and the field crew at the excavation viewing areas. It is also suggested that newspaper publicity be sought during the course of the excavations to increase public visitation. Finally, a permanent display illustrating the contributions of archaeology to the understanding of Fort Frederick and Maryland history should be installed in the visitor interpretation center.

EXCAVATION METHODOLOGY AND PROCEDURE

In general, excavation methodology will consist of standard excavation and recording procedures as established throughout the eastern United States at historic sites. More specifically, the utilization of equipment, recording techniques and procedures are as follows:

Provenience control - the mapping system to be used will be in English measurements to facilitate interpretation of structural features which obviously were constructed using English measurements. Horizontal control will be by means of transit survey utilizing permanent datum points as needed and as convenient. Vertical control will consist of a combination transit and line level technique with extreme care taken to properly record level thicknesses and overall depths. Mapping will be on scale graph paper and will be done by the field supervisor, the Principal Investigator, and/or experienced crew members. Grid system units will be designated by means of a technique worked out by the Principal Investigator and the State Archaeologist. Individual grid units will be marked by metal stakes and nylon cord as appropriate.

Excavation - both hand methods and machinery will be used whenever appropriate. The hand excavation will consist of initial shoveling utilizing flat shovels or, if conditions necessitate it, round shovels. Trowels and other small implements will be used exclusively in features of historical significance. Crew members will be instructed to take care to remove all in situ material intact if possible. In situ material will be bagged separately if called for or with sifted material from within the same unit and level if unassociated with other items. All soil from significant features will be screened through $\frac{1}{2}$ inch screen. Sizeable representative samples of significant levels will be retained for subsequent fine screening and/or flotation.

- machine excavation will be conducted when necessary. The use of a backhoe and front end loader, of appropriate size, will be by experienced members of the archaeological crew and or the Principal Investigator or field supervisor. During all trenching operations one or two crew members with shovels will be assigned to follow the machine in order to dress down walls and floors and to immediately investigate all possible significant features.

Photographic Record - two cameras will be on hand at the excavation site at all times - a 35mm. color slide camera (Minolta 202) and a $2\frac{1}{4}$ by $2\frac{1}{4}$ viewfinder box camera (Rolliflex or Rollicord). Overall photographs will be made on a regular basis for use in public interpretation displays, site interpretation, publications and for record shots. All features and significant profiles will be photographed in black and white and in color slides. A chalk board will be used in feature record shots.

EXCAVATION SCOPE

Excavations are to be carried out in four general areas; the southwest bastion, the interior of the curtain walls, the exterior ditch area, and the potential village area to the west of the fort. The attached maps illustrate the general areas and units to be excavated.

Southwest Bastion - 48 excavation units (parts of which will be excavated in 22 of the 48) covering approximately 3600 square feet of ground will be excavated in this area. anticipated depth of each unit will be from 2 to 4 feet, Back fill will be wheelbarrowed to a sifting and dumping area adjacent to the curtain wall immediately west of the gate. Excavation will be scheduled in a checkerboard method to increase control through profile study. Backfilling will follow analysis.

Interior Curtain Walls - in order to determine the presence of the proposed earth-filled parapet walls, five trenches should be excavated as shown on the accompanying sketch. Each trench will be ten feet in width and twenty feet in length. It will be necessary to situate those trenches on both sides of the gate so that they will not intrude in the suggested guard house (s) area. Trench depths are unpredictable but no extraneous features will be completely excavated, limits, however will be determined if within the trenches.

Exterior Ditch - in order to demonstrate the existence of an outside ditch two trenches will be dug, one on the north and one on the south of the fort. If evidence of a ditch is found two additional trenches will be dug to determine if the north ditch ran the entire length of the north curtain wall. Additional work will be conducted on the west side of the fort (see below). Ditch trenching will be by machinery as described above. Total trench length will be 100 feet.

West Village Area - extensive trenches will be excavated by machine and hand in the area west of the fort as designated in the Request for Proposal. Trenches will be five feet in width and range in length as conditions allow. The accompanying sketch illustrates the general location of trenches. A total of 1000 feet of shallow trench will be excavated. All features found within trenches will be excavated within the limits of the trench. Trench placement is conjectural, early discoveries will modify the accompanying sketch placement.

what do you mean?
grid?
adequate but requires enclosure drawing no

SOUTHWEST BASTION


FORT FREDERICK, MARYLAND

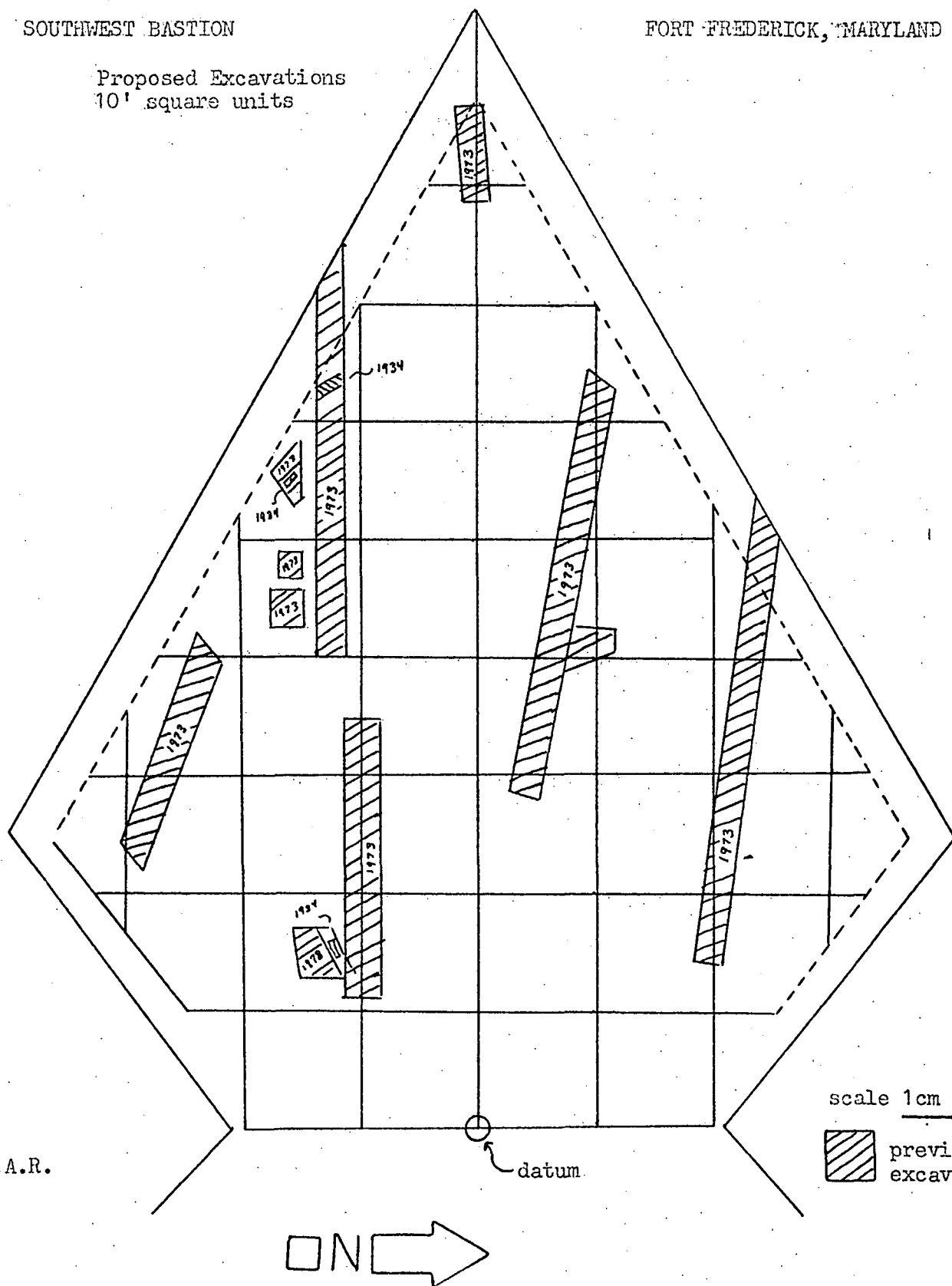
Proposed Excavations
10' square units

M.A.A.R.

datum

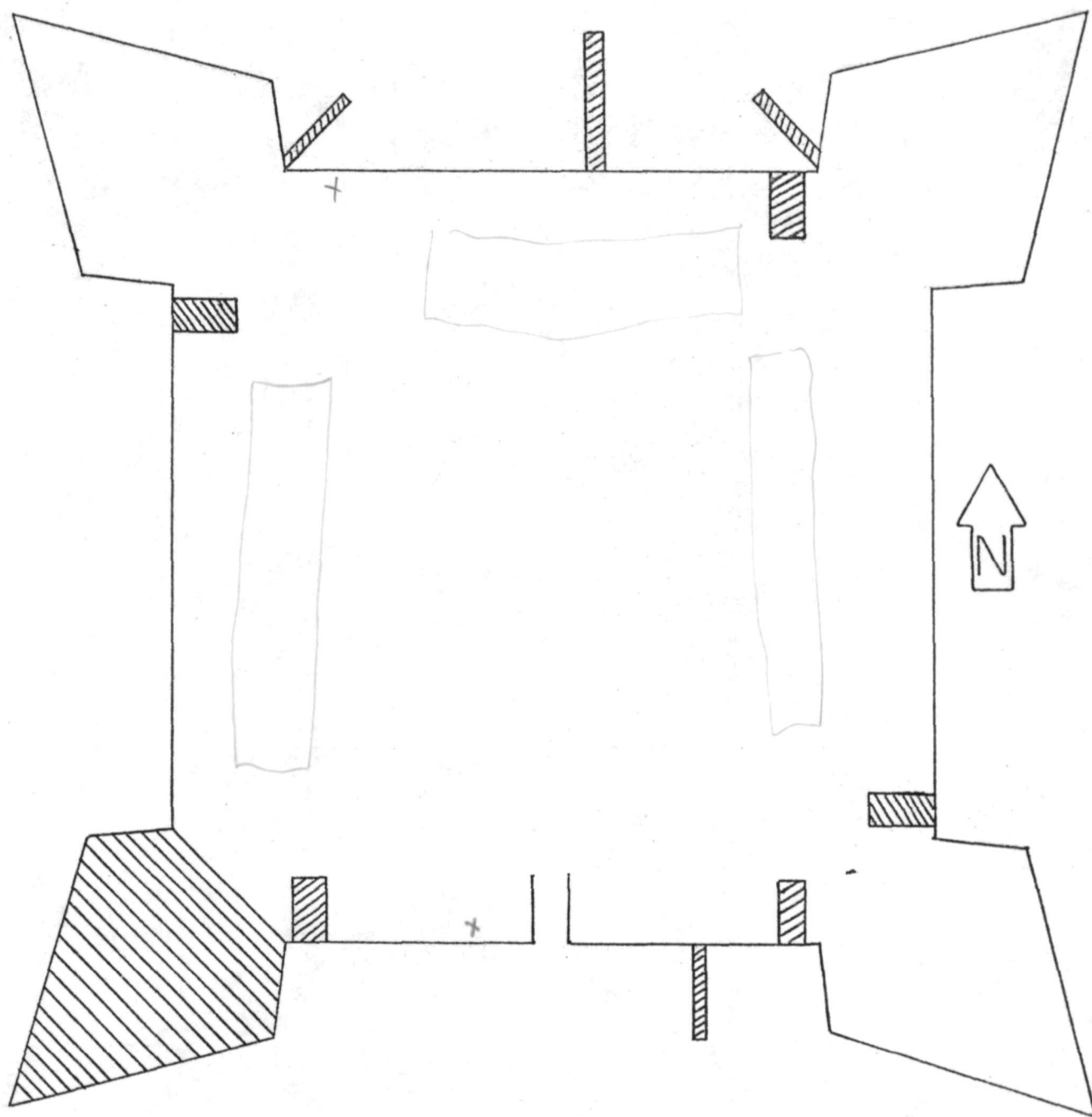
scale 1cm = 5'

 previous excavations



PROPOSED EXCAVATIONS

FORT FREDERICK, MARYLAND



M.A.A.R.

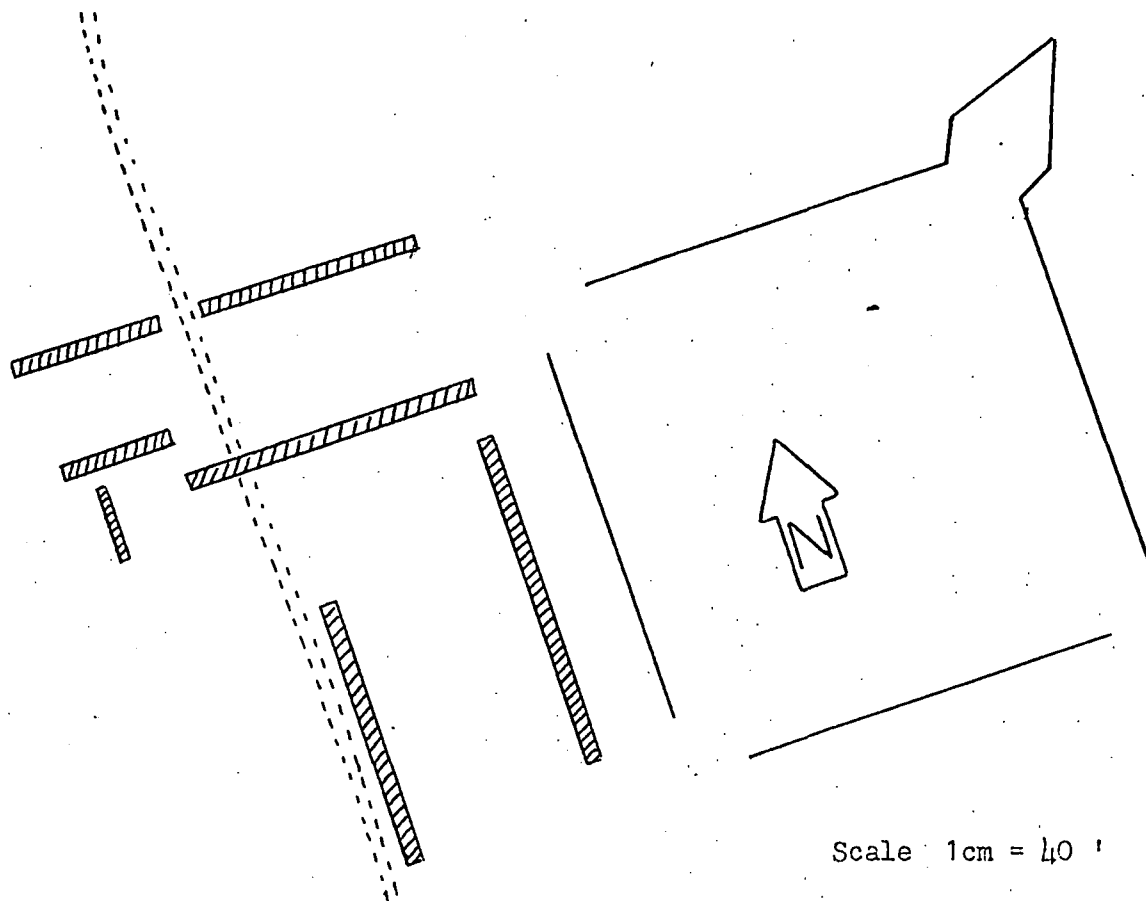
1 cm. = 20'

To Be
Excavated

WEST "VILLAGE AREA"

FORT FREDERICK, MARYLAND

Proposed Excavations
M.A.A.R.



Scale 1cm = 40'

CULTURAL DATA ANALYSIS

Analysis of excavated data will commence immediately upon completion of the field operations. Initial laboratory work will consist of washing, cleaning, preserving, cataloging and inventorying artifacts and associated data. Artifact processing will correspond to the Maryland Geological Survey system of recording. All material will be photographed prior to submission of specialists. Records will be duplicated and a complete set kept together at all times.

Historical data from a variety of previously excavated historical sites will be used by Ms. Betty Cosans of Philadelphia during her analysis of the Fort Frederick artifactual and feature data. All identifiable artifacts will be identified as to date of manufacture, place of origin, and artifact useage. The major emphasis will be on a comparison of the Fort Frederick assemblage with other military, rural and urban assemblages known to Ms. Cosans. Attempts will be made to define status, degree of urbanization (ie. imitation of the way of life in urban centers), local availability of common colonial items, etc.

This same tact will be taken with the analysis of the faunal and floral refuse recovered at the fort. Ms. Sharon Burnston will compare the Fort Frederick assemblage with others with which she is familiar (see resumes). Here the emphasis will be on food availability and how it reflects status or the general nature of trade during the periods in question. Perhaps some insight can be obtained on the changes in available foodstuffs from the 1754-56 occupation and that of the prison occupation.

in what way?
Field notes, drawings, and photographs will be analysed by Edward F. Heite of Dover who has had considerable experience in historic sites archaeology. Any structural features will be checked with the artifact assemblage excavated within its boundaries to assist in determining function and probable dates of use. Ms. Cara Wise of Dover will be asked to contribute to the total interpretation of the Fort Frederick data. Recommendations will be based on an evaluation of the scientific data, the educational potential or reconstruction, and the need for certain types of data as derived by Mr. Heite, Ms. Wise, Ms. Cosans, Ms. Burnston, and the Principal Investigator.

REPORT

The final report will meet the specifications as set forth in the Request for Proposal.

COST PROPOSAL

COST PROPOSAL

PHASE I Preparatory Activities *4 days*

Principal Investigator	(4 days)	\$300.00	
Field Supervisor	"	\$200.00	
Consultants	(2 days)	\$300.00	
Overhead (40% wages)		\$200.00	
Mileage (\$.16 prm)	(350 miles)	\$56.00	
Living Expenses		\$100.00	
Rental of Quarters for Crew		\$500.00	\$1656.00

PHASE II Southwest Bastion *18 days*

Principal Investigator	(8 days)	\$600.00	
Field Supervisor	(18 ")	\$900.00	
Crew (<i>3</i>)	(90 ")	\$3060.00	
Consultants	(4 ")	\$500.00	
Overhead		\$1824.00	
Mileage		\$115.20	
Expenses		\$50.00	\$7049.20

PHASE III Interior Curtain Walls *10 days*

Principal Investigator	(4 days)	\$300.00	
Field Supervisor	(10 ")	\$500.00	
Crew (<i>2</i>)	(20 ")	\$650.00	
Overhead		\$580.00	
Mileage		\$120.00	
Expenses		\$10.00	\$2310.00
Consultants	(1 day)	\$150.00	

PHASE IV Exterior Ditch

Crew	(18 days)	\$630.00	
Power Equipment Rental		\$200.00	
Overhead		\$252.00	
Supplies		\$30.00	\$1112.00

PHASE V Village Area West

10 days

Principal Investigator	(6 days)	\$450.00	
Field Supervisor	(10 days)	\$500.00	
Crew	(65 ")	\$2225.00	
Consultants	(4 days)	\$500.00	
Overhead		\$1270.00	
Supplies		\$150.00	
Mileage		\$168.00	
Power Equipment		\$700.00	\$5963.00

PHASE VI Analysis/Report Preparation

20 days

Principal Investigator	(20 days)	\$1500.00	
Field Supervisor	(5 ")	\$250.00	
Lab Processing Crew	(20 days)	\$600.00	
Consultants		\$3000.00	
Overhead		\$940.00	
Supplies		\$200.00	\$6490.00

Summary of Phase Costs

I.	\$1656.00	IV.	\$1112.00
II.	\$7049.20	V.	\$5963.00
III.	\$2310.00	VI.	\$6490.00

*total days = 62 =
12 weeks*

Total Project Cost

\$24,580.20

Cost Analysis

Principal Investigator - Field	\$1650.00
- Report	\$1500.00
Field Supervisor	\$2350.00
Field & Lab Crew	\$7165.00
Consultants	\$4450.00
Mileage	\$459.20
Supplies & Expenses	\$1040.00
Power Equipment	\$900.00
Overhead Costs	\$5066.00

MID-ATLANTIC ARCHAEOLOGICAL RESEARCH, INC.

MID-ATLANTIC ARCHAEOLOGICAL RESEARCH, INC.

The organization proposing this work is aware of the need to have access to a variety of equipment, libraries, services, etc. so as to properly conduct an archaeological investigation. Mid-Atlantic Archaeological Research, Inc. owns all necessary non-mechanical field equipment needed for the successful completion of the Fort Frederick project. Such equipment has been accumulated over a period of two years and utilized on at least ten previous projects conducted by Mid-Atlantic Archaeological Research, Inc. and its predecessor, the Delmarva Clearinghouse for Archaeology, Inc. Included in the inventory are small and large digging tools; recording tapes, rules, surveying equipment, etc.; photographic equipment; a vehicle; and all associated office equipment necessary to complete the report.

Laboratory equipment for artifact and floral and faunal analysis will be provided by the consultants for the project. Ms. Betty Cosans has access to large historic artifact collections at the National Park Service offices in Philadelphia and at various museums throughout the area. Ms. Burnston has access to domesticated fauna specimens at the Philadelphia Veterinary Hospital and in various museum collections.

As stated in the Request for Proposal, staff is to be considered as of primary importance in the awarding of a contract by the Maryland Department of Natural Resources. Attached is a summary of Mid-Atlantic Archaeological Research, Inc. personnel scheduled for the Fort Frederick project. Complete vitas are attached if presently available, others will be submitted when appropriate.

The following personnel are proposed for the project; the positions to be filled are briefly outlined below.

- Principal Investigator - will have total decision making responsibility in (\$75.00) regards to approaches, scheduling, etc. Will regularly visit the site for two day periods or longer as needed.
- Field Supervisor - will participate in the entire project and will have immediate (50.00) responsibility for day to day decisions, recording, crew members,
- Field Crew Assistant - recording, power equipment operation, area supervisor, (40.00)
- Crew Member A - experienced in similar archaeological excavation projects (\$35.00)
- Crew Member B - experienced in archaeological excavations, not necessarily (\$30.00) historic sites archaeology

Consultants - on site visitations - \$100.00 per day plus expenses

- analysis as per negotiations based on experience, performance, etc.

OTHER FACILITIES AVAILABLE

Temple University Archaeological Laboratories
Island Field Archaeological Museum and Research Center
University of Pennsylvania Museum

BRIEF PERSONNEL RESUMES

Principal Investigator - Ronald A. Thomas

Membership in the Society of Professional Archaeologists, President of the Eastern States Archeological Federation, membership on numerous committees and advisory boards; Academic training at Pennsylvania State University (B.A. in Anthropology), the University of Arkansas (M.A. in Anthropology) the University of Pittsburgh and currently a Ph-D candidate at Temple University;

Delaware State Archaeologist from 1965 until present (currently on leave); previous experience in prehistoric archaeology (see vita); historic sites archaeological experience includes excavations at an Arkansas civil war encampment (brief), excavations at the Peter Alricks House, the Parson Thorne Mansion, the Webb Landing well or privy site, Caldwell's Tavern, Clyde Farm brick kiln, and indirect supervision of crews working at Naamen's Tea House, the Old State House (Dover), Arnold's Creek house site, Gilpin Well, Kingston-upon Hull.

Field Supervisor - Glen Mellin

B.A. in Anthropology from the University of Delaware, formerly with the summer staff of the Section of Archaeology (Delaware) survey archaeologist with the William Penn Museum and with Jack McCormack Associates, crew member with the Delmarva Clearinghouse for Archaeology, crew member with Alexander Levy Associates

Prehistoric archaeological experience in the State of Delaware on numerous surveys and excavations; Historic sites archaeology as follows - Valley Forge National Park as crew member and assistant director under Vance Packard of the William Penn Museum in 1971 and 1972, Washington's Crossing Inn and Grist Mill with the William Penn Museum in 1973, Gilpin Well excavations, Puncheon Run survey project, investigator of 17th century plantation at Mastic Beach on Long Island, survey of light house tract on Fire Island

Assistant Field Supervisor - Robert Asreen

B.A. in Anthropology from City College of New York, graduate student at Hunter College and later at Washington State University, Staff of Delaware Section of Archaeology, survey staff of the South Carolina Archaeological Survey

Prehistoric archaeological experience (see Vita); historic sites include field supervisor at the Old State House (Dover), Barker's Landing well, Oddessa (M.O.T.) survey.

Field Crew - Kurt Kalb

B.A. in Anthropology from Rider College (recent), presently a graduate student in Anthropology at Temple University.

see vita for prehistoric sites experience, historic site excavation at Clyde Farm and at several surveys conducted recently in New Jersey.

Consultant - Edward F. Heite

B. A. and M.A. in history at the University of Richmond, graduate work as a Hagley Fellow at the University of Delaware, formerly with the Virginia Landmarks Commission as an archaeologist, currently with the Division of Historical and Cultural Affairs, State of Delaware

both prehistoric and historic sites experience extensive (see vita)

Consultant - Cara L. Wise

B.A. from Beloit College in Anthropology, presently a graduate student at Catholic University, formerly Archaeologist, Archaeological Aide and Historic Site Manager with the Section of Archaeology, State of Delaware, now Environmental Review Officer with the Division of Historical and Cultural Affairs.

prehistoric sites archaeology extensive (see vita); historic sites experience at the Old State House (Dover), Naamen's Tea House, the Dingee Houses, the Murphy House, Loockerman Hall

Consultant - Sharon Ann Burnston

B.A. in Anthropology from Brooklyn College, presently a graduate student at Temple University.

Prehistoric experience at the Ozette Indian Village Site complex in Washington and the Grasshopper site in Arizona; historic site excavations and/or consultant at Tell Asrad in Israel, Blue Anchor Tavern in Philadelphia under Barbara Liggett Franklin Court IV, Head House East, Independence Hall, Fort Putnam, Historic Deerfield under Dr. Donald Friary.

Consultant - Betty Cosans

PERSONAL RESUME

Ronald A. Thomas
949 Westview Terrace
Dover, Delaware 19901

A.C. 302 678-9394

Date of Birth: 11/14/40
Marital Status: Married
Health: Excellent
SSN: 165-32-2948

EDUCATION:

Uniontown High School Uniontown, Pennsylvania	1958 Academic
Pennsylvania State Univ. University Park, Penna.	1962 B.A. Anthropology
University of Arkansas Fayetteville, Arkansas	1969 M.A. Anthropology
University of Pittsburgh Pittsburgh, Penna.	1964 Ph.D. Candidate Anthropology
Temple University Philadelphia, Penna.	1976 Ph.D. Candidate Anthropology

EXPERIENCE:

Field Crew Member	1960-61 Sheep Rock Shelter, Excavations of the Pennsylvania State Museum and Historical Commission
Project Supervisor	1962-65 Breckenridge Shelter and numerous other University of Arkansas projects
Teaching Fellow	1964 University of Pittsburgh at Johnstown, General Anthropology
State Archaeologist	1965-75 Delaware Archaeological Board and Section of Archaeology
Instructor	1967-73 University of Delaware, Archaeology
Instructor	1971 Gannon College Field School, Archaeology
Archaeology Supervisor	1975-76 Section of Archaeology, Delaware
Executive Officer and Principal Investigator	1976-76 Delmarva Clearinghouse for Archaeology and Mid-Atlantic Archaeological Research, Inc.

ORGANIZATIONAL AFFILIATIONS:

Eastern States Archeological Federation

Recording Secretary	1969-74
President-Elect	1974-76
President	1976-78

Society for American Archaeology

Committee on Public Archaeology
Committee on Employment

Society for Historical Archaeology

Charter Member

Middle Atlantic Archaeological Conference

Founding Member

Delaware Academy of Sciences

American Society for Conservation Archaeology

Society of Professional Archaeologists

PUBLICATIONS:

- 1963 "Prall Shelter (3BE187)" BULLETIN OF THE ARKANSAS
ARCHEOLOGICAL SOCIETY, Vol. IV, No. 10, pp. 3-5 Fayetteville
- 1963 "Projectile Point Sequence at Breckenridge Shelter" BULLETIN
OF THE ARKANSAS ARCHEOLOGICAL SOCIETY, Vol. III, No. 10, pp. 1-3
- 1963 "3LR49: An Open Site in Southwest Arkansas" BULLETIN OF THE
ARKANSAS ARCHEOLOGICAL SOCIETY, Vol. IV, No. 10, pp. 12-14
- 1963 "Archaeological Investigations at the Keenom Farm" (ms.)
- 1965 DELAWARE ARCHAEOLOGY, Vol. 1, No. 1, EDITOR, Dover
- 1966 "Excavations at Prall Shelter (3BE187) in Beaver Reservoir,
Northwest Arkansas" BULLETIN OF THE ARKANSAS ARCHEOLOGICAL
SOCIETY, Vol. VII, No. 4, with Hester A. Davis
- 1966 DELAWARE ARCHAEOLOGY, Vol. 2, No. 1, EDITOR
- 1966 "The Delaware Archaeological Board Site Survey: A Progress
Report" DELAWARE ARCHAEOLOGY, Vol. 2, No. 1, pp. 2-14

- 1966 DELAWARE ARCHAEOLOGY, Vol. 2, No. 2, EDITOR
- 1966 "7NC-F-7, the Hell Island Site" DELAWARE ARCHAEOLOGY, Vol. 2, No. 2, pp. 1-18
- 1966 DELAWARE ARCHAEOLOGY, Vol. 2, No. 3, EDITOR
- 1966 "Paleo-Indian in Delaware" DELAWARE ARCHAEOLOGY, Vol. 2, No. 3, pp. 1-11
- 1966 DELAWARE ARCHAEOLOGY, Vol. 2, No. 4, EDITOR
- 1966 "Archaeological Investigations on Milford Neck" DELAWARE ARCHAEOLOGY, Vol. 2, No. 4, pp. 1-26 with Cara Lewis
- 1967 "Archaeology in Delaware" Delaware Archaeological Board handout, 4 pp. Dover
- 1966 "Preliminary Investigations at the Old Martin Place" National Park Service manuscript, 33 pp.
- 1968 "Hunters and Fishermen of Prehistoric Delaware" DELAWARE CONSERVATIONIST, Vol. XII, No. 3 Dover
- 1969 "Archaeology in Delaware" Department of Public Instruction Pupil Guide, CONSULTANT and EDITOR Dover
- 1970 "The Island Field - A prehistoric Village and Cemetery" Delaware Archaeological Board handout, 19 pp. Dover
- 1970 "Adena Influence in the Middle Atlantic Coast" in ADENA: THE SEEKING OF AN IDENTITY, Ball State University, Edited by B.K. Swartz, Jr. pp. 56-87 Muncie, Indiana
- 1970 "1970 Salvage Excavations at the Mispillion Site" THE ARCHEOLOG, Vol. XXII, No. 2 pp. 1-23 with Nancy H. Warren Seaford, Del.
- 1970 "A Middle Woodland Cemetery in Central Delaware: Excavations at the Island Field Site" BULLETIN OF THE ARCHAEOLOGICAL SOCIETY OF DELAWARE, No. 8 NS pp. 1-33 with Nancy H. Warren Wilmington
- 1972 PROCEEDINGS OF THE THIRD ANNUAL MIDDLE ATLANTIC ARCHAEOLOGICAL CONFERENCE, EDITOR
- 1972 Dorthey Cross Jenzen: An Obituary. MAN IN THE NORTHEAST Vol. 4, page 81
- 1973 "Two Small Stone Effigies from Cecil County, Maryland" MARYLAND ARCHEOLOGY

- 1973 "Cached Blades from a Millsboro Site" THE ARCHEOLOG, Vol. XXV, No. 1, pp. 1-4 Bethel, Delaware
- 1973 PROCEEDINGS OF THE FOURTH ANNUAL MIDDLE ATLANTIC ARCHAEOLOGICAL CONFERENCE, EDITOR, Penns Grove, New Jersey
- 1973 "Prehistoric Mortuary Complexes of the Delmarva Peninsula" PROCEEDINGS OF THE 4th ANNUAL M.A.A.C., pp. 50-72 Penns Grove
- 1974 "Hunters and Gatherers Were Eating Well Long Before Supermarkets", DELAWARE CONSERVATIONIST, Vol. XVIII, No. 2, with Daniel R. Griffith Dover pp. 4-7
- 1974 "A Brief Survey of Prehistoric Man on the Delmarva Peninsula", Proceedings of the Delaware Academy of Science, 15 pp. Newark
- 1974 "Webb Phase Mortuary Customs at the Island Field", PROCEEDINGS OF THE DELAWARE ACADEMY OF SCIENCE, 13 pp. Newark
- 1974 "A Discussion of the Lithics, Ceramics, and Cultural Ecology of the Fox Creek-Selby Bay Paradigm as it Applies to the Delmarva Peninsula" to be published in the Proceedings of the Fifth Annual Middle Atlantic Archaeological Conference, with Daniel R. Griffith, Cara L. Wise, & Richard E. Artusy, Jr. Baltimore, Maryland
- 1975 LITHIC SOURCE NOTEBOOK, EDITOR, issued periodically
- 1975 "Heirlooms and Treasures of the Webb Phase Indians" 1974 Catalogue of the Delaware Antiques Show, pp. 39-43 Wilmington, Delaware
- 1975 "Environmental Adaptation on Delaware's Coastal Plain", ARCHAEOLOGY OF EASTERN NORTH AMERICA, Vol. 3, pp. 35-90, with Daniel R. Griffith, Cara L. Wise, & Richard E. Artusy, Jr. Ann Arbor
- 1975 "A Survey of Historic Sites Archaeology in the Delmarva Peninsula" Proceedings of the Delaware Academy of Science, Newark
- 1976 "Early Man at Holly Oak, Delaware" SCIENCE, Vol. 192, No. 4241 pp. 756-761, With Dr. John C. Kraft Washington, D.C.
- 1976 "A Re-evaluation of the St. Jones River Site" ARCHAEOLOGY OF EASTERN NORTH AMERICA, Vol 4, Ann Arbor

PERSONAL RESUME

Kurt R. Kalb
78 Mercer Street
Hamilton Square, New Jersey 08690

Date of Birth: March 23, 1945
Marital Status: Married
SSN: 160-36-6518

609-587-4640

EDUCATION:

Avon Grove Area High School June, 1964

Rider College B.A. Biology
Trenton, New Jersey February 1975

Undergraduate Courses:

Prehistoric Archaeology
Archaeology Field Experience
Environmental Biology
General Ecology

EXPERIENCE:

Summer 1974	Field Worker for the State of New Jersey involved in the survey of prehistoric sites within the proposed community of Beckett, near Bridgeport, New Jersey. Sites were located and tested to determine significance for preservation.
Spring 1974	Assistant to course instructor during Archaeology Field Experience course sponsored by Rider College and located at the Lange site, Bridgeport, New Jersey. Assisted supervision of students in proper excavation techniques and identification of artifacts.
Spring 1973	Field worker at Argo's Corner site, Delaware. Employed by James Julian, Inc, in cooperation with the State of Delaware, Section of Archaeology to undertake salvage excavation of prehistoric site.
Summer 1972	Acting supervisor of two man team, employed by C. Paul Nickle in cooperation with the State of Delaware, Section of Archaeology to excavate Clyde Farm Site, Delaware.

Spring 1972

Field worker at Iron Hill Quarry site, Delaware,
excavated by the State of Delaware, Section of
Archaeology.

In addition to above described work experience, I have been involved briefly
(from one day to one week) in the following excavations: Savich Farm site,
New Jersey; Panella site, New Jersey; and the Indian Mound site, Delaware.

For the past twenty years, I have been involved in site surveying, surface
collecting and the identification of and labeling of prehistoric artifacts.
Presently, I am excavating a jeopardized, multi-component, prehistoric site
near Trenton, New Jersey. The results should be published shortly.

ORGANIZATIONAL AFFILIATION:

Archaeological Society of Delaware
Archaeological Society of Maryland
Archaeological Society of New Jersey
Society for Pennsylvania Archeology
Eastern States Archeological Federation

RECOMMENDATIONS:

(Will be furnished upon request).

PERSONAL RESUME

Edward F. Heite
21 South Main Street
Camden, Delaware 19934

697-1789

Date of Birth: January 18, 1939
Marital Status: Married
Health: Excellent
SSN: 221-24-5844

EDUCATION:

Dover High School Dover, Delaware	1957
Richmond College University of Richmond Richmond, Virginia	1961 B.A. History
University of Richmond Graduate School Richmond, Virginia	1963 M.A. History
University of Delaware Hagley Program Newark, Delaware	1970-1972 Postgraduate work in History

EXPERIENCE:

March 1972-present	Historic Registrar, Division of Historical and Cultural Affairs. Directed historic site survey, wrote and prepared for a press history of Delaware, researched Delaware archaeology and historic sites, conducted in-depth research for restorations and nominations to the National Register of Historic Places.
1972	The Old State House, restoration archaeology now in progress.
1971	Naaman's Tea House, eighteenth-century house site in Claymont.
1970	Fredericksville Furnace, an early eighteenth-century ironmaking site.

Conducted statewide survey of historical archaeology, excavated sites, including seventeenth and eighteenth century houses. Researched for restoration, advised restoration committees and planned preservation projects.

- 1969 Point of Honor, a mansion under restoration in Lynchburg, Virginia.
- 1969 Accomack County jailyard salvage excavation.
- 1969 Ware Bottom Church, Chesterfield County, Virginia.
- 1969 John Hallows Site, a seventeenth-century yeoman's house in Virginia's Northern Neck.
- January 1968-September 1970 Archaeological Historian, Virginia Historic Landmarks Commission.
- 1968-1970 A survey of Virginia brickmaking sites for the Virginia Landmarks Commission.
- 1967 Eppes Island, an early eighteenth-century house site in Virginia
- 1965-66 Lower Westover Church, Charles City County, Virginia.
- Edited the quarterly historical journal of the Virginia State Library, verified research, produced the magazine, edited text.
- February 1963 - December 1967 Managing Editor, Virginia Cavalcade.
- (Site Director at all above named sites.)

ORGANIZATIONAL AFFILIATIONS:

Society for Historical Archaeology
Council for Northeast Historical Archaeology, board member and program chairman
Conference on Historic Site Archaeology
Society for Post-Mediaeval Archaeology
Society for Industrial Archaeology
Archaeological Society of Virginia, past officer
Archaeological Society of Maryland, Inc.
Sussex Society of Archeology and History
Archaeological Society of Delaware
Delmarva Archaeological Council
Chesapeake Archaeological Association
Steamship Historical Society of America
Association for Preservation Technology
Nautical Research Guild

PUBLICATIONS:

- Sept. 1972 "Several Virginia Brick Clamps: A Summary of Brickmaking".
QUARTERLY BULLETIN, ARCHAEOLOGICAL SOCIETY OF VIRGINIA.
Pages 48-55.

- March 1972 "American Made Pipes From the Camden Site", QUARTERLY BULLETIN, ARCHAEOLOGICAL SOCIETY OF VIRGINIA, pages 94-99.
- March 1972 "Excavation of the Accomack Jailyard Wall", QUARTERLY BULLETIN, ARCHAEOLOGICAL SOCIETY OF VIRGINIA, pages 150-151.
- April 1972 "Excavations at the Ware Bottom Church Site, Chesterfield County, Virginia", THE CHESOPLEAN, pages 37-42.
- June 1972 "A Collection of Pamplin Pipes", QUARTERLY BULLETIN, ARCHAEOLOGICAL SOCIETY OF VIRGINIA, pages 211-212.
- June 1972 "Methods and Forms of Topographical Histories", QUARTERLY BULLETIN, ARCHAEOLOGICAL SOCIETY OF VIRGINIA, pages 208-210.
- March 1971 "Pipes from the Pamplin Factory in Appomattox County, Virginia", QUARTERLY BULLETIN, ARCHAEOLOGICAL SOCIETY OF VIRGINIA, pages 195-196.
- 1971 "The Hallows Site: a seventeenth-century yeoman's cottage in Virginia," HISTORICAL ARCHAEOLOGY, pages 38-48 (with William T. Buchanan, Jr.)
- 1971 "Thinking the Whole Site: Some Considerations in Planning an Excavation", CONFERENCE OF HISTORIC SITE ARCHAEOLOGY PAPERS, pages 45-50.
- Sept. 1970 "A Collection of Eighteenth-Century Artifacts from Gaine's Point, Gloucester County, Virginia, QUARTERLY BULLETIN, ARCHAEOLOGICAL SOCIETY OF VIRGINIA, pages 49-59.
- Sept. 1970 "Boxing a Very Old Compass: How to Plat", QUARTERLY BULLETIN, ARCHAEOLOGICAL SOCIETY OF VIRGINIA, pages 20-23.
- Dec. 1969 "Excavation of the Fredericksville Furnace Site", QUARTERLY BULLETIN, ARCHAEOLOGICAL SOCIETY OF VIRGINIA, pages 61-96.
- Dec. 1969 "Pipe Industry History Reflected in Tools", QUARTERLY BULLETIN, ARCHAEOLOGICAL SOCIETY OF VIRGINIA, pages 118-119.
- Winter 1968 "Painter of the Old Dominion," VIRGINIA CAVALCADE, pages 11-19.
- Spring 1968 "An English View of Virginia", VIRGINIA CAVALCADE, pages 30-31.
- Spring 1968 "Virginia Twists the Lion's Tail", VIRGINIA CAVALCADE, pages 41-47.
- Sept. 1968 "Eppes Island House Site, Charles City County, Virginia," QUARTERLY BULLETIN, ARCHAEOLOGICAL SOCIETY OF VIRGINIA, pages 39-49.
- 1968 "Colonial Brick Technology", CONFERENCE ON HISTORIC SITE ARCHAEOLOGY PAPERS, pages 43-49.

- March 1967 "Martin Swamp Site, Chesterfield County," QUARTERLY BULLETIN,
ARCHAEOLOGICAL SOCIETY OF VIRGINIA, pages 84-88.
- Winter 1967 "An Architect Looks At Richmond", VIRGINIA CAVALCADE, pages 22-30.
- Winter 1966 "Extra Billy Smith", VIRGINIA CAVALCADE, pages 5-13.
- Spring 1966 "Scientist on the Bridge", VIRGINIA CAVALCADE, pages 4-8.
- June 1966 "Epes Tavern Quartzite Assemblage", QUARTERLY BULLETIN,
ARCHAEOLOGICAL SOCIETY OF VIRGINIA, pages 116.
- Summer 1966 "Latrobe's Proposals for Virginia", VIRGINIA CAVALCADE, pages 33-48.
- Spring 1965 "Judge Robert Ould", VIRGINIA CAVALCADE, pages 10-19.
- Autumn 1965 "Captain Robert B. Pegram, Hero Under Four Flags", VIRGINIA
CAVALCADE, pages 38-43.
- Winter 1964 "The Tunnels of Richmond", VIRGINIA CAVALCADE, pages 42-47.

(The preceeding list represents selected publications of E.F. Heite)

PERSONAL RESUME

Cara L. Wise
299 Daniel Rodney Drive
Dover, Delaware 19901

734-7941

Date of Birth: November 15, 1943
Marital Status: Married
Health: Excellent
SSN: 221-28-3999

EDUCATION:

Brandywine High School Wilmington, Delaware	1961
Beloit College Beloit, Wisconsin	1965 B.A. Anthropology
University of New Mexico Field School	1962
University of Oklahoma Field School	1963
Catholic University Washington, D.C.	1974-75 Graduate Work
Graduate Courses:	
Cultural Ecology	1974
North American Indians	1974
Environmental Studies: Soils and Geology	1975
Seminar: Eastern U.S. Pre- history	1975

EXPERIENCE:

September 1974-present

Delaware Historic Preservation Section
Activities included: preparation of final
report on Dingee Houses excavations, pre-
paration of preliminary report on the 1972
and 1974 excavations at Robinson House,
conducted excavations at Loockerman Hall
and the Old State House in 1975, responsible
for all archaeological activities of the
section, including excavation, analysis and
report writing.

September 1970-September 1974, Section of Archaeology, State of Delaware.
March 1967-September 1969 Activities included field crew supervisor 1967, 1968 and 1969 seasons at the Island Field Site, supervised field crew for excavations at Robinson House and Dingee Houses in 1974 where duties included determining equipment needs, setting up excavations, training crew and maintaining records, supervised laboratory personnel in processing materials, responsible for organizing special study collections, responsible for storage and cataloguing all surface collections and excavated material, responsible for ceramic, lithic and faunal analyses for site reports, under team approach responsible primarily for ceramic analyses, responsible for preparing final interpretive drawings for the Old State House excavations, set up and maintained a comprehensive catalog of lecture and record slides, organization of library as well as over-seeing purchases of additional volumes, overseeing the printing of several kinds of publications ranging from record forms to a 130 page handbook, general research in Delmarva archaeology, ceramic research as part of a team approach to site reports and in the development of independent research projects.

Other related experiences include teaching of a course in amateur archaeology for the Milford Adult Education Association, speaking to numerous archaeological societies in Delaware and Maryland.

1973-present

Director of the Delmarva Clearinghouse for Archaeology, Inc.

1973

Supervised the excavation of the Nassawango Creek Adena Site under contract to the Maryland Geological Society and the Lower Delmarva Chapter of the Archaeological Society of Maryland, Inc.

ORGANIZATIONAL AFFILIATIONS:

Society for Historical Archaeology

Society for American Archaeology

PUBLICATIONS:

Wise, Cara L.

- 1975 The Introduction and Development of Ceramics in the Middle Atlantic and Northeast. (Paper presented at the Tenth Annual Maryland Spring Symposium on Archaeology, Annapolis, Maryland.)
- 1975 A Proposed Sequence for the Development of Ceramics in the Middle Atlantic and Northeast. (Paper presented at the Sixth Annual Middle Atlantic Archaeology Conference, Lancaster, Pa.).
- n.d. A Proposed Early to Middle Woodland Sequence for the Delmarva Peninsula. MARYLAND ARCHAEOLOGY, Bulletin of the Archeological Society of Maryland, Inc.
- 1974 Two Early Pottery Vessels from Kent County, Delaware. THE ARCHEOLOG, Vol. XXVI, No. 1, Sussex Society of Archeology and History.
- 1974 Mockley Ware and Its Precursors and Successors on the Delmarva Peninsula, with R.A. Thomas; D.R. Griffith; and R.E. Artusy, presented at the Fifth Middle Atlantic Archaeology Conference, Baltimore, Maryland.
- 1973 The Nassawango Creek Adena Site. (Paper presented for the 1973 Eastern States Archeological Federation meeting, Newark, Delaware.)

Lewis, Cara L.

- 1972 Early Pottery on the Delmarva Peninsula. (Paper presented at the 1972 Eastern States Archeological meeting in Harrisburg, Pa.)
- 1972 Crushed Quartz Tempered Vessel from Indian River. THE ARCHEOLOG, Vol. XXIV. Sussex Society for Archeology and History, Delaware.
- 1971 A HANDBOOK FOR DELMARVA ARCHAEOLOGY. Office of Archaeology, Dover. (reprinted in 1974).
- 1969 ARCHAEOLOGY IN DELAWARE: PUPIL'S GUIDE. Ronald A. Thomas, Consultant. State Department of Public Instruction, Dover.

RECOMMENDATIONS:

Dr. W. Fred Kinsey, III
North Museum
Franklin and Marshall College
Lancaster, Pennsylvania 17604

Dr. William Gardner
Department of Anthropology
Catholic University
Washington, D.C. 20017

Dr. Burt Salwen
New York University
Department of Anthropology
Washington Square
New York, New York 10003